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Letter From the Editor

Dear Readers,

It is as if we have started this journey yesterday, but here we are again with you in our 20th issue.

The number of subscribers have doubled in the last 7 issues. And there is a considerable interest to this review and its writers. We owe this to you, once again thank you...

This week, we have Serkan Bahceci back from the military service, in full throttle writing about economics of electricity generation. Welcome back Serkan, our readers and we missed you a lot!

Haluk Direskeneli has written an encouraging comment regarding the basis for developing a local generation industry. Although the contents and title may be provocative, the message is crystal clear, as you will see.

Also, our editor-in-chief Rovshan Ibrahimov has touched on the hot topic of last week: Putin's visit to Central Asia. Maybe the picture is not that bad. Is Nabucco really dead? Yes, but there is an additional "but" to be said.

Last but not least, Mr. Umudov has a brief report on Azerbaijan's SOCAR's investment in Georgia.

Once again, remember to check our website
<http://www.turkishweekly.net/energy>

Until next week,

My Best Regards.

Editor

Economics (or lack thereof) of electricity generation in Turkey

Dr. Serkan Bahceci, serkan@londoneconomics.com
USAK Energy Review

The story, as taught in *Economics 101* goes like this: Firms consider long-run revenues and costs. For each firm, the break-even point is defined as the point where revenues and costs are equal. Note that economic costs cover the opportunity costs, including the return on capital. If costs are greater than revenues then some firms exit the industry; supply shifts back, pushing prices and hence revenues for the remaining firms upwards. On the other hand, if revenues are greater than costs then there will be new entry into the industry; shifting supply forward, and prices and revenues downwards.

Let us keep this basic economic reasoning in mind and look at the costs and revenues of electricity generators in Turkey. The revenues are relatively easier to estimate. Table 1, below, shows the average price of electricity for industrial consumers in selected countries in 2005.

Table 1. Average 2005 electricity price for industrial consumers

Country	Prices in USD/MWh
Italy	\$173.90
South Cyprus	\$125.40
Japan	\$120.50
Turkey	\$106.60
Austria	\$101.70
Denmark	\$100.70
Ireland	\$99.40
Portugal	\$98.00
Romania	\$96.20
Hungary	\$95.60
United Kingdom	\$86.70
Slovakia	\$86.30
Switzerland	\$83.30
Spain	\$83.30
Germany	\$80.75
Czech Republic	\$80.60
Finland	\$70.40
Poland	\$69.90
Greece	\$67.00
Australia	\$63.95
South Korea	\$58.80
United States	\$57.30
Taiwan	\$57.10
Canada	\$51.45
France	\$49.80
Norway	\$43.40

Source: International Energy Agency, Energy Prices & Taxes - Quarterly Statistics, Fourth Quarter, 2006, Part II, Section D, Table 21, and Part III, Section B, Table 18, 2007.

Before going further into the main discussion, as a side note Table 1 tells a very sad and well-known tale. The cost of energy for industrial consumers is high in Turkey, leading to a higher-than usual dependence on distributed generation or auto-production of electricity. In other words, industrial consumers are forced to set up small scale –

mostly gas-fired – generating units for their own use and at their own cost. Such dependence on distributed generation is simply inefficient due to the enormous economies of scale existing in the generation technologies.¹

There is also the other side of the coin: If electricity is expensive for the consumers (industrial or otherwise) then the revenues of electricity generators have to be relatively higher. Clearly, Table 1 presents all-inclusive prices (including transmission and distribution charges) born by the end-users. The amount many generators receive is recently determined to be 9.13 Ykr/KWh or approximately US\$65/MWh by Energy Market Regulatory Authority.²

The main question is whether \$65/MWh is high enough of a price to incentivize entry into the power generation business or not. The answer is not straightforward. There are different types of generation units, using different fuel types and technologies. Units based on fossil fuels usually bear high short-run marginal costs (fuel costs plus O&M expenses, environmental costs, etc.). Units based on renewable resources – including the hydro units – bear high fixed costs, required to set up the turbines and other necessary construction.

Table 2. Approximate cost structures of selected types of generation units, \$/MWh

	fuel cost, \$/MWh	O&M, \$/MWh	amortized carrying charge over debt term, \$/MWh	annual debt repayment, \$/MWh	annual equity return, \$/MWh	Total, \$/MWh
Scrubbed coal @ 85% LF	\$20	\$11	\$6	\$12	\$21	\$69
IGCC @ 85% LF	\$16	\$11	\$8	\$17	\$31	\$84
IGCC with Sequestration @ 85%	\$18	\$14	\$12	\$25	\$44	\$113
Nuclear @ 95% LF	\$4	\$14	\$20	\$6	\$8	\$52
CCGT @ 80% LF	\$52	\$7	\$2	\$7	\$7	\$74
SCGT @ 15% LF	\$77	\$21	\$8	\$28	\$44	\$179
Small Hydro @ 40% LF	\$0	\$8	\$16	\$73	\$50	\$147
Wind @ 15% LF	\$0	\$35	\$11	\$100	\$69	\$215
Wind @ 15% LF with subsidy	\$0	\$35	\$11	\$100	\$48	\$195

LF stands for Load Factor – the percentage of hours within a year that the unit is running.

O&M stands for Operation and Maintenance expenses.

Source: Author's own calculations and estimates.

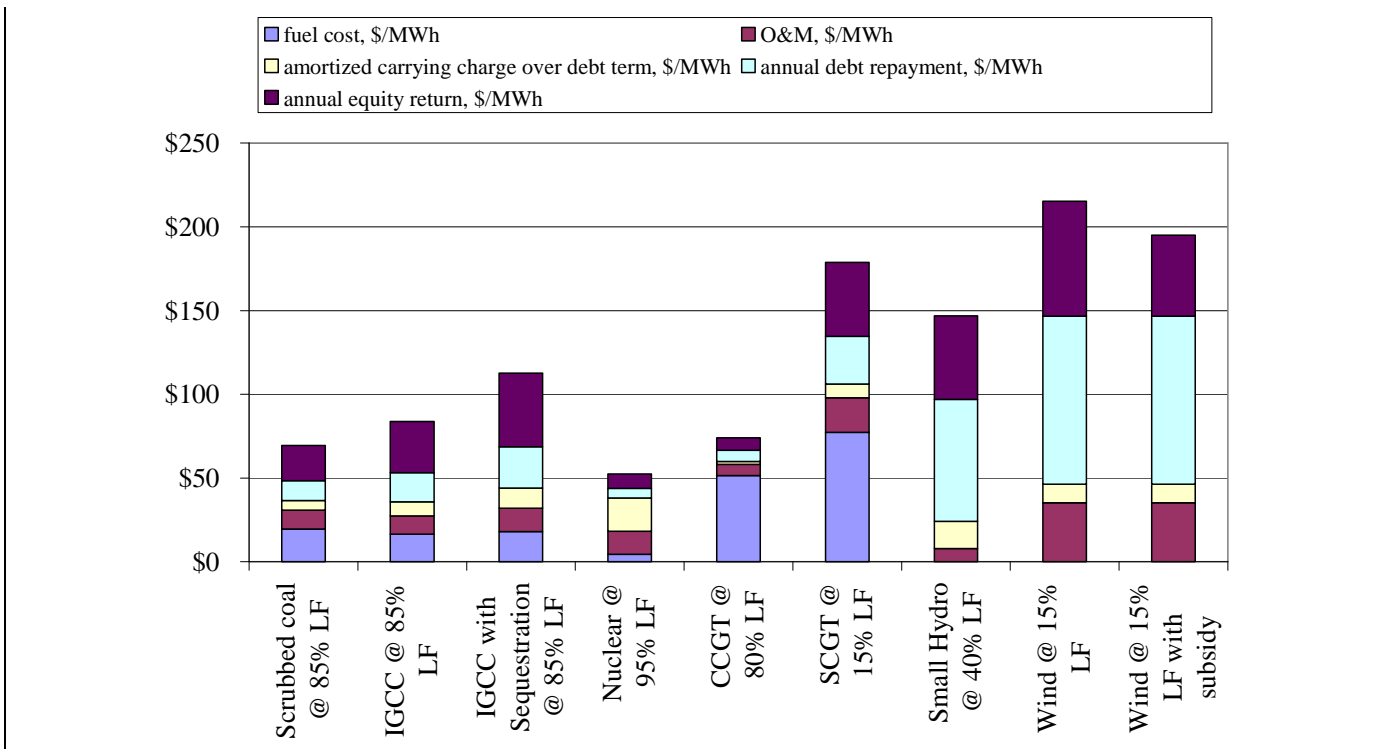
Table 2 and the following Figure 1 below, give approximations of such variable and fixed costs for representative units on a per MWh basis.³ Note that the table is provided only for illustrative purposes and the approximations depend on many underlying assumptions about the fuel prices, load factors, leverage, interest rate, siting costs, etc. Simple inspection of the total estimated costs suggest a \$65/MWh fixed price does make new entry in any technology impossible. The only exception is the nuclear technology, which requires a huge initial investment.

Figure 1. Approximate cost structures of selected types of generation units, \$/MWh

¹ For a detailed discussion of the economics of distributed generation see A.J. Goulding and Serkan Bahçeci, “Standby Rate Design: Current Issues and Possible Innovations”, *The Electricity Journal*, Volume 20, Issue 4, May 2007, Pages 87-96.

² Energy Market Regulatory Authority Decision No 1062/23, January 18, 2007.

³ The approximations are based on my experience in the North American and European markets and the margin of error might be high especially for fixed cost portion (e.g. construction costs in Turkey is usually lower but there are other impediments, such as the bureaucratic red tape). Needless to say, any feedback from our readers on this issue will be greatly appreciated.



The two arguments might be seemed as a dilemma. First, we are complaining that electricity price faced by the end-users is very high. Second, we argue that electricity price is not high enough to allow new investment in the sector.

The answer though, is very simple, and lies in the structure of the market. A year-long constant electricity price makes economics of electricity meaningless. Electricity across time is not a homogenous good, that can be produced at a constant or stable cost at all times. The cost of generation as well as the overall demand fluctuates over time. Prices should also be allowed to fluctuate so that some kind of demand response is possible. At off-peak periods where demand is lower than the average, the price will most likely to be lower than the ongoing \$65/MWh. Moreover, during peak periods where electricity prices are higher, units with low load factors and high costs will be running and be economical. In short, fluctuating prices will allow different types of technologies with different cost structures (mainly due to the discrepancy between the high-fixed-cost-low-variable-cost baseload units and the low-fixed-cost-high-variable-cost midmerit or peaking units). A well-functioning and reliable market requires all types of such units active, each serving a different purpose. It is clear that a market with fluctuating prices, giving right signals at the right times is required. My final word is liberalization in the sector seems to be the only solution to Turkey's underinvestment problem in the electricity sector.

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Castration effect!

One day in late 2006, a Korean Company has internally decided to come to Turkey, to capital city Ankara in order to meet with reputable local companies private and public for future cooperation and partnering in local Turkish energy market. Through an international business colleague, they asked your writer to help them in local networking. At first we asked appointment from top management of public companies, Ministry, EUAS, TEDAS, and TEIAS etc.

Our Public companies have the similar attitude these days. They say "Since we should get 3- offers and evaluate for almost 3-months for each bolt we need, we cannot finalize any investment in the modern times in a reasonable short period of time. Therefore we ask private investors to make the investment. We expect the maximum rental fee for our treasury." Good point, good thinking, very logical.

We also asked appointment from private companies for mutual meetings for future cooperation. Most of them accepted and invited us to their head offices. That was almost no cost for them other than some business time to allocate

On both sides, we had almost similar presentations. At first, our visiting foreign Company introduced their colorful hardcopy documentation, their home country references of various thermal power plants, as well as nuclear. Documentations were beautiful but they had no meaning in content. Anyhow that was something other than nothing. They had pictures of their international experiences, reference plants in the Middle East and elsewhere. However these documentations were explained with relatively poor verbal English.

In response our local companies explained how wonderful work they do in local and/or international environments

Surprisingly Turkish scope covered only civil works and site installation, plus maybe some construction of administration buildings / some catering. That was all. It is a pity.

Most of our companies don't have courage to exceed these simple activities. These activities are simple, hard work with minimum cost, almost with minimum value added value. It is so sad to say that our companies cannot handle basic engineering, they cannot handle overall leadership.

So we all handle the hard work, whereby our international partners get the biggest portion of the scope and profit.

The Koreans were at the lowest life style in 1950s in the Korean War and at that time we sent our troops to save them. After 50 years, their GNP is almost twice of ours now. Korean Company had turnkey engineering and complete project leadership capability. They constructed all their thermal power plants by themselves. Similarly they constructed many nuclear power plants in Korea under license.

They have the same software and hardware available as elsewhere, and they purchased the necessary technical license to handle design works of all types' thermal power plants. They recently signed a license agreement with a reputable USA company to construct CFB boilers to fire all types of poor quality with low LHV local lignite.

In the international markets, today US or UK companies, German/ French/ Italian companies are too expensive. They can not receive any order in our local market due to their high market prices. On the other hand China, Indian, Korean companies are relatively cheaper in turn key EPC contracts

If we do not show our engineering expertise, our market will soon be dominated by these Eastern companies and as a result our local companies will be doing only the simple hard work with lowest profit margins.

We visualize a sort of "Castration Effect" in our local contracting companies. That is unfortunately created by our



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public companies over the years while looking for international foreign companies. All we need is courage, at least within our own environment. We should start to construct our own thermal power plants by ourselves. Foreign companies cannot design; construct power plants to fire our special local indigenous lignite. Only Turkish engineers can do it, since we live all our life with this local fuel.

Our local private companies are to decide if they will continue to have simple works all the time, and vanish, or make drastic change and start doing new investments on engineering talent by supplying the engineering staff with appropriate software and hardware, plus necessary technical licensing, to enable their companies work as turnkey EPC contractor as leading company. That is the most important key decision now.

Finally we have some good news for you. A local investor company built its own 3x60 MWe Combined cycle power plant in Aliaga through its own engineering capability. They are now planning to build new coal fired power plant. Another local contracting company has completed their local lignite fired CFB steam boiler in Konya Cumra sugar plant. It is in successful trial operation for last 2-years. We are very happy to learn that a leading Turkish energy company has built their combined cycle power plants in Ankara Sincan and Kayseri Organized Industrial zones based on their own local engineering capability. They received recent order for construction of similar plants in Israel and Russia.

As the old saying goes, "If you think you can, you can."
Your comments are always welcome

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SOCAR Energy Georgia's Investments in Georgia

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Company of SOCAR Energy Georgia established by State Oil Company of Azerbaijan Republic, in Georgia in early 2006. SEG is subsidiary company of the state run company of SOCAR which is the world's 68th largest company. This new-born and open joint-stock company intends to invest in various economic projects in Georgia by means of the new enterprise.

At the beginning, a network of retail sales of oil products planned to be set up. Moreover SOCAR Energy Georgia will found its own companies in this country and intends to purchase gas-filling stations those selling fuel with SOCAR brand, and also to build new ones as well. The Director-General of the Energy Georgia Mahir Mammedov emphasized that they planned to build at least 20 gas-filling stations from scratch and these stations mostly will be built in the surroundings of Tbilisi and in other regions of the Georgia, not in the city centers, because there are already so many stations, so it is elaborative to build stations far from them. And stations will differ by their designations and high-techs. And its noteworthy, to say that SOCAR Energy is going to invest 20mln.USD in 2 years to the economy of Georgia.

SOCAR Georgia acquired nearly 100 hectares in the Kulevi Terminal located on the shores of the Black Sea and Georgian government also added further 200 hectares to the territory of the terminal. This terminal is one of the most controversial projects due to its concerned damage to the environment.

In 1998 World Bank approved USD 4.4mln.loan to the Georgian Integrated Coastal Management Project(GICMP) which also funded by USD1.3mln.grant from Global Environment Fund, USD 1mln grant from Dutch Government USD 0.9mln from the government of Georgia.(total 7.6 mln). GICMP was designated to strength institutions in Georgia to manage the coastal resources of the Black Sea by developing and evaluating methods to effectively integrate environmental planning and to assist Georgia in meeting its international commitments. For this end, there were two main components of the GICMP; one is the establishment of the Kolkheti National Park and the development of the State Consultative Commission on Integrated Coastline Zone Management. But commence of construction of the Kulevi Oil Terminal somehow undermined this project. Namely, in 1999 construction began on private-funded Kulevi Oil Terminal within the Kolkheti, Ramsara site and part of the Kolkheti National Park. So local and International NGOs petitioned the WBG to call for a stop to all oil-related construction in the National Park. Bank investigated the issue and gave report on September, 2001 to halt construction. Finally in 2002 construction on KOT stopped, reportedly as a result of insufficient finances. However, in 2004, the Georgian oligarch Badri Patarkastshvilli secured funding for the continuation of the project. Later on SOCAR Georgia acquired Terminal from oligarch Badri.

If completed the KOT would consist of 16 tanks with a capacity of 22.000 cubic meter each serviced by a railway that will transport up to 35mln tons of oil through National Park,in final phase, 100.000tons to 150.000tons tankers would transport oil through NP marine reserve out of the Black Sea. And as Director-General of the Energy Georgia Mahir Mammedov stated the KOT will be ready by the third quarter of the 2007.At the moment construction continues on the controversial railway of Kolheti-Kulevi. At present it is geared up to process up to 10mln tons of oil per year and in the near future its capacity will be increased up to 15-20mln tons which will provide an opportunity to become a major oil supplier for the world market.

To sum up, KOT has the potential to challenge the monopoly which Batumi Oil Terminal holds in Georgia. BOT ,owned by Greenoak Group, which is an international Investment Company providing capital as well as management resources; the group activities include oil transportation ,shipment and number of industrial investments. Thus as a consequence BOT concerned closely with the construction of Kulevi Oil Terminal due to its potential power to challenge BOT and seeing these developments has called on Georgian government to intervene and 'correct' the situation.

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The Energy Summit in Poland And Putin's Visit To The Central Asia- Predicted Results

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Two events that Energy Summit in Poland and Russian President Putin's visit to Kazakhstan undoubtedly related to the definition of routing the flow of energy in the Eurasian space. May 11, Poland brought together the Presidents of Azerbaijan, Ukraine, Georgia and Lithuania. President of Kazakhstan Nazarbayev also was invited to the Polish initiative, but Putin's visit in Kazakhstan failed his appearance at the summit.

Many analysts rated that Putin visit in Kazakhstan deliberately failures Poland initiative. The main objective, which Russia tried to prevent with Putin visit in Kazakhstan, is possible decision of summit on export of energy resources from Central Asia, bypassing Russia, following the example of Azerbaijan. This country, after construction of Baku-Tbilisi-Ceyhan oil pipeline and Baku-Tbilisi-Erzurum gas pipeline, has been able to export own oil and gas with alternative to Russia routes to the world markets.

It might appear at first sight that Russia has achieved the desired result. In particular, Kazakhstan has stated that up to 80% or 42 million tones of oil exports, he plans to hold through Russia. At the same time, an agreement was signed between Russia, Kazakhstan and Turkmenistan in which they plan jointly to construct Caspian gas pipeline from Turkmenistan via Kazakhstan to the territory of Russia. As a result, Russia has ensured that the export of natural gas from Turkmenistan to the world market place through its territory.

These two factors can be shown as successful tactic to prevent energy supplies from Central Asian countries to the world markets, bypassing Russian territory. But in reality, however, is in a slightly different vein. First of all, the initiative of the energy summit in Krakow was proposed by Polish President Lech Kaczynski. For the first time he made such a proposal during his visit to Ukraine, where he once again expressed the interest of Poland to diversify energy supplies. Later, similar proposals have been offered by Polish President to his colleagues from Kazakhstan and Azerbaijan, during his visit to these countries.

Apart from these countries also Georgia and Lithuania took participation in summit. Georgia participated as the state which may play role of the major transit route for a possible diversification of energy supply routes from the Caspian basin. Moreover, this country was the first of consumers to reap the benefits of alternative energy supplies when Russia increased the price of natural gas deliveries and then she was able to buy gas from Azerbaijan avoiding economic crisis.

Lithuania, in turn affected from Russia refused to make its territory available for export Kazakh oil in the country. Kazakhstan planned to privatize refinery plant in that country and to undertake the production of oil products from their own oil. Following the refusal of Russia the only alternative route for oil imports for Lithuania will route which will run through Ukraine, Poland and Lithuania.

Concrete relocation, which should be consistent at the summit were providing alternative ways for the delivery of hydrocarbon resources from the Caspian region to Europe. In particular, bring of the intentions of the producers, transitors and consumers of energy in conformity with the Energy Charter, plans to prolong a pipeline of Odessa-Brody for Caspian oil till the cities Plotck and Gdansk, possible construction of additional pipeline from the Baku-Tbilisi-Ceyhan pipeline to the EU countries, including Germany.

It should be noted that in Krakow summit besides Azerbaijan and Kazakhstan others are importers of energy. And in this case, the non-participation of Kazakhstan can be seen by some tactical victory for Russia to derail the event. In this case lacking of guaranteed supply of energy from the Caspian region it's impossible to

think about possibility of realization of the idea holding a summit. But from the other side it's not like seems from the first sight.

The summit in Krakow was primarily the personal initiative of the President of Poland. While on the agenda were the provisions relating to the overall EU energy policy, we can safely say that Poland is primarily followed the national interest in this case. Indeed, in case an agreement on the key issues of the summit the country would become a key actor in the development of alternative routes and would be a major transit hub.

The same applies to Georgia and Ukraine. Both countries have gone through a "velvet revolutions" and openly adopted a policy of full integration into European structures. Both countries already got confirmation for possibility of NATO accession. The projects which proposed for discussion in Krakow summit would enable those countries to obtain additional dividends in the process of integration with the EU. Since this states will play role of the transitors for the alternative energy supply in the EU states.

Azerbaijan after achieving alternative routes for exporting of own energy resources, this country has been able to independently conduct its own foreign policy and freely participated in the Energy summit without regard to Russia. Interest of Azerbaijan in participating in the summit is to explore the possibility of developing new alternative routes to export their energy to world markets.

Azerbaijan is ready to support any alternative routes based on two principles. First, the projects will not be financially burdened the country and the second will let to state organize own production of finished oil products in the markets of the countries to which the oil will flow.

Regarding the non-participation of Kazakhstan, the first and foremost reason for this is the official visit of President of Russia Putin to the country on May 10-15. Putin truly choose time for the visit and the signing of an agreement for the construction of the Caspian pipeline. This would be like saying that the summit plans were abandoned for the simple reason that the alternative routes would be impossible to find enough energy as hydrocarbons from Central Asian countries will be exported through Russia.

In my view both events absolutely have no relationship. Even if it were not predicted to energy summit in Poland, all of the agreements signed between Russia, Kazakhstan and Turkmenistan have been approved in any event. Firstly, it should be pointed out that with the signing of an agreement to build a pipeline Russia is not reached any new dividends, but only received additional guarantees for the existing arrangements to supply natural gas from Turkmenistan to Russia, which date back to the life of former President Samarmurad Niyazov.

The construction of the Caspian pipeline will primarily provide a stable import of this natural gas. In turn, the President of Turkmenistan Berdymuhamedov during the signing an agreement with Russia noted that the country does not withdraw from consideration and implementation of alternative export routes for Turkmen gas.

As for Kazakhstan, at first glance, it might appear that Russia has ensured that the country has moved away from alternative export routes for its oil. Quoting President Nazarbayev of Kazakhstan exported 52 million tons of oil, 42 million it plans to export through the territory of Russia. But it should not be forgotten that in the coming years the volume of oil exports from Kazakhstan will reach 100 million tons and the volume of oil Kazakhstan undoubtedly will seek new ways to deliver to the world markets.

This oil mostly will be produced by the Western companies, and therefore a decision on which route to export hydrocarbons will be taken in conjunction with these companies.

Kazakhstan itself has been an interest in Putin's visit to the country. During the meeting, the presidents of



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those countries were considered to connect Kazakhstan to the Burgaz-Aleksandropolus pipeline project. In addition to that Russia intended to achieve a possibility the increase in crude oil supplies from Kazakhstan to Orenbourg oil refinery, located in Russia, in which privatization was very interested in Kazakhstan.

Another reason for the refusal of Kazakhstan from the Energy Summit is that the country still depends on Russia for the use of transport infrastructure to export oil. Kazakhstan has yet to opportunities to diversify supply, and therefore is a more prudent policy on this matter. At the moment, the question of increased pumping and the revision of tariffs on oil passes through the Caspian pipeline, the main export pipeline for Kazakh oil.

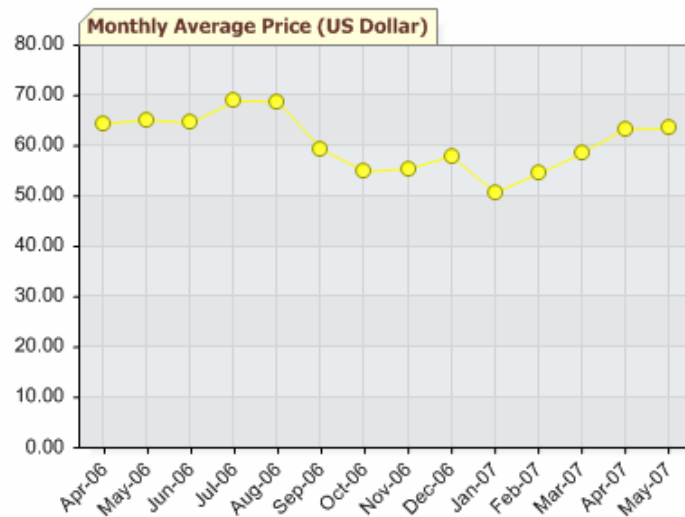
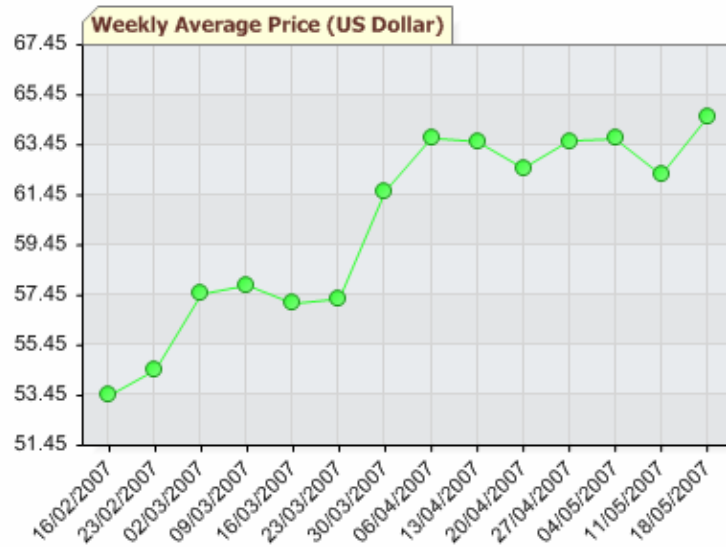
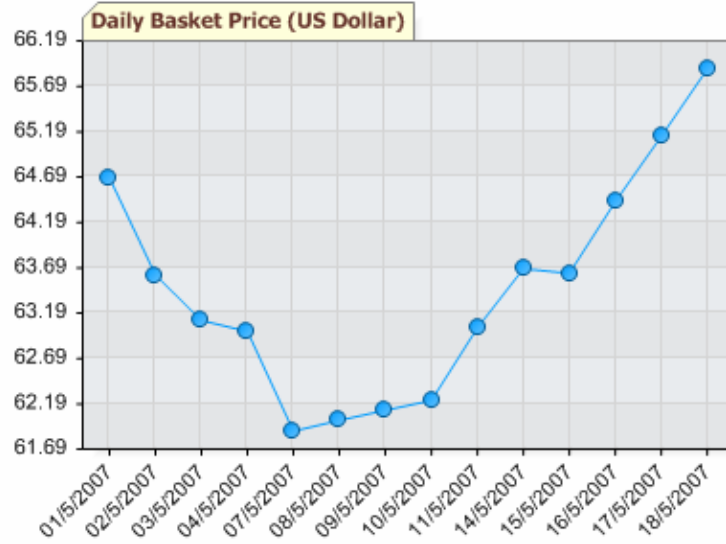
Russia is attempting to use this issue as an attempt to pressure Kazakhstan to implement its own national interests. In addition, if the projects described in Poland, Kazakhstan will be able to join until a few years later, when the oil is flowing into the Baku-Tbilisi-Ceyhan pipeline.

Summarizing an analysis of these two events, it should be noted that at this stage in the energy transport projects await another flight and should not. Poland, correctly identifying weaknesses in the common energy policy of EU assumed courage for promoting of its own policies. However, the question of other countries and EU members could decide not to support those countries. With regard to Russia, President Putin only correctly estimated the situation and in some decisive moves created an illusion collapse intention to create diverfikatsionnyh ways to bypass Russia. In the short term, it is possible, because both Kazakhstan and Turkmenistan in dire need of this country to export its own hydrocarbons. And until you have achieved specific projects towards west, such as Nabucco or trans pipeline, the leaders of the Central Asian countries will not risk putting forward their own initiatives in this regard. This will require active involvement in projects such as the EU as a whole and its members. Meanwhile, the two summits have what it had to in this situation.

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Indicators

OPEC's Basket Price



Indicators

Indicative Exchange Rates Announced at 15:30 on 21/05/2007 by the Central Bank of Turkey

CURRENCY	EXCHANGE RATES		EXC.RATES ON BANKNOTES	
	Buying	Selling	Buying	Selling
USD/TRY 1 US Dollar	1.3152	1.3215	1.3143	1.3235
EUR/TRY 1 EURO	1.7727	1.7812	1.7715	1.7839
GBP/TRY 1 British Pound	2.5912	2.6047	2.5894	2.6086

Turkish Refinery Output Price

Product Name	YTL/TON	YTL/M3	Special Concise Tax	Dividend	Exclusive of VAT	VAT	VAT included price	Validity Date
Unleaded Petrol 95 OCTANE			YTL/M3	YTL/M3	YTL/M3	YTL/M3	YTL/M3	
İzmit	1.061,08	806,42	1.362,50	1,40	2.170,32	390,66	2.560,98	02/05/2007
İzmir	1.061,08	806,42	1.362,50	1,40	2.170,32	390,66	2.560,98	02/05/2007
Kırıkkale	1.065,13	809,50	1.362,50	1,40	2.173,40	391,21	2.564,61	02/05/2007
Batman	1.093,49	831,05	1.362,50	1,40	2.194,95	395,09	2.590,04	02/05/2007
Jet Fuel			YTL/M3	YTL/M3	YTL/M3	YTL/M3	YTL/M3	
İzmit	917,96	734,37	0,00	1,40	735,77	132,44	868,21	10/05/2007
İzmir	917,96	734,37	0,00	1,40	735,77	132,44	868,21	10/05/2007
Kırıkkale	930,06	744,05	0,00	1,40	745,45	134,18	879,63	10/05/2007
Kerosene			YTL/M3	YTL/M3	YTL/M3	YTL/M3	YTL/M3	
İzmit	917,96	734,37	760,50	1,40	1.496,27	269,33	1.765,60	10/05/2007
İzmir	917,96	734,37	760,50	1,40	1.496,27	269,33	1.765,60	10/05/2007
Kırıkkale	938,13	750,50	760,50	1,40	1.512,40	272,23	1.784,63	10/05/2007
Batman	944,85	755,88	760,50	1,40	1.517,78	273,20	1.790,98	10/05/2007
Diesel 7000			YTL/M3	YTL/M3	YTL/M3	YTL/M3	YTL/M3	
İzmit	851,26	719,31	834,50	1,40	1.555,21	279,94	1.835,15	12/05/2007
İzmir	851,26	719,31	834,50	1,40	1.555,21	279,94	1.835,15	12/05/2007
Kırıkkale	882,13	745,40	834,50	1,40	1.581,30	284,63	1.865,93	12/05/2007
Batman	891,52	753,33	834,50	1,40	1.589,23	286,06	1.875,29	12/05/2007
Diesel 50			YTL/M3	YTL/M3	YTL/M3	YTL/M3	YTL/M3	
İzmit	876,60	740,73	927,00	1,40	1.669,13	300,44	1.969,57	11/04/2007
İzmir	876,60	740,73	927,00	1,40	1.669,13	300,44	1.969,57	11/04/2007
Kırıkkale	918,40	776,05	927,00	1,40	1.704,45	306,80	2.011,25	11/04/2007
Fuel Oil 4			YTL/TON	YTL/TON	YTL/TON	YTL/TON	YTL/TON	
İzmit	591,29		476,00	1,50	1.068,79	192,38	1.261,17	01/05/2007
İzmir	591,29		476,00	1,50	1.068,79	192,38	1.261,17	01/05/2007
Fuel Oil 6			YTL/TON	YTL/TON	YTL/TON	YTL/TON	YTL/TON	
İzmit	443,35		204,00	1,50	648,85	116,79	765,64	12/05/2007
İzmir	443,35		204,00	1,50	648,85	116,79	765,64	12/05/2007
Kırıkkale	450,04		204,00	1,50	655,54	118,00	773,54	12/05/2007
Batman	450,04		204,00	1,50	655,54	118,00	773,54	12/05/2007

Source : www.tupras.com.tr